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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,695	02/04/2004	Paul D. Hanke	040049	4373
45453 7590 05/15/2007 BUCHANAN INGERSOLL PC (ARCHER DANIELS MIDLAND COMPANY) 301 GRANT STREET, 20TH FLOOR PITTSBURGH, PA 15219			EXAMINER KIM, ALEXANDER D	
			ART UNIT 1656	PAPER NUMBER
			MAIL DATE 05/15/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/771,695	Applicant(s) HANKE ET AL.	
	Examiner Alexander D. Kim	Art Unit 1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19, 20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 is/are allowed.
- 6) ☒ Claim(s) 19, 20, 22, 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Application Status***

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 02/28/2007 has been entered. Applicants amendment canceling Claims 1-18, 21, 25-32; amending Claims 23-24 in the paper of 9/6/2006 is acknowledged. Thus, Claims 19-20 and 22-24 are pending and will be examined in the instant Office action.

***Priority***

2. As previously noted, the application claims the benefit of a divisional application of prior-filed U.S. applications 09/722,441 (filed on 11/28/2000), which claims benefit of provisional application 60/184,130 (filed on 02/22/2000) and 60/173,707 (filed on 12/30/1999) under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Applicant's claim no foreign priority under 35 U.S.C. 119(a)-(d).

***Withdrawn-Objections to the Specification***

3. The previous objection of specification, because the deletion of Isoleucine (Ile) in figure 24 introducing a new matter, is withdrawn by the virtue of Applicants' amendment.

4. The previous objection of the Abstract is withdrawn by the virtue of Applicants' amendment.

***Objections to the Specification***

5. The previous objection of Figure 24 is maintained because of a translation of AT into a Ile in the sequence listing and the Figure 24. Applicants filed replacement Figure 24 and amended the description to clarify the issue to overcome the objection.

However, as cited in the previous office actions, the Figure 24 still disclose an AT dinucleotide encoding the amino acid Ile122. Clarification is required.

***Withdrawn-Objections to the Claims***

6. The previous objection of Claim 19 having wrong status is withdrawn by the virtue of Applicants' amendment.

7. The previous objection of Claim 23 because of the use of "The host cell" is withdrawn by the virtue of Applicants' amendment.

***Withdrawn-New Matter***

8. The previous rejection of Claims 19-20, 22, and 24 are rejected under 35 U.S.C. 112, first paragraph, new matter, is withdrawn by the virtue of Applicants disclosure indicating support for Claim 19.

9. The previous rejection of Claim 24 under 35 U.S.C. 112, first paragraph, scope of enablement, is withdrawn by the virtue of Applicants' amendment

***Maintained-Claim Rejections - 35 USC § 103***

10. The previous rejection of Claims 19-20, 22, and 24 under 35 U.S.C. 103(a) as being unpatentable over Pisabarro et al. (1993 May, Journal of Bacteriology, Vol. 175, pp. 2743-2749 as cited in IDS) in view of Labarre et al (1993, Journal of Bacteriology, Vol. 175, p. 1001-1007) and Hirano et al. (US Pat. 6,090,597, Jul 18, 2000) is maintained. Applicants' arguments have been fully considered but are not deemed persuasive for the following reasons.

Applicants argue the disclosure of "it is likely that ORF2 is translated in Corynebacterium" by Pisabarro et al. is a blanket statement and "not a suggestion that it is involved in L-lysine production or that increasing translation of the open reading frame would increase L-lysine production" (see Remarks p. 9, top). However, the translation of ORF2 involved in L-lysine production is not required by the instant claims.

Applicants also allege there is no motivation to combined Pisabarro with any of the other cited references with no expectation of success. As noted in the previous

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office actions mailed on 11/29/2006, one would be motivated to do so because Pisabarro et al. suggest "it is likely that ORF2 is also translated in corynebacteria" in lysine biosynthesis (see bottom left column, last paragraph, p. 2748) and Labarre et al. teach a "reliable and general method" (see Material and Methods" on page 1001-1002 and page 1006, left column bottom) for inserting genes into the chromosome of *C. glutamicum*. Labarre et al. also disclose chromosomal integration enhances expression of encoded protein (Table 3) and suggest the technique can be used "in studying and eventually modifying complex host functions such as high-level amino acid production" (see p. 1007, left column, top).

Applicants also argue the instant rejection is an improper because the nature of SEQ ID NO: 19 that is truncated form of the full amino acid of ORF2 of Pisabarro et al.; thus, there is no guidance to direct and select the start and end points as shown in the instant invention. However, the instant claims does not require to have only the instant fragment of ORF2. The instant claims are broad to encompass any polynucleotide molecule as long as it includes a nucleotide sequence encoding the polypeptide fragment (i.e., SEQ ID NO: 19).

For the reasons above, the instant rejection is maintained.

***Summary of Pending Issues***

11. The following is a summary of the issues pending in the instant application:
  - a) The previous objection of Figure 24 is maintained
  - b) The Claims 19-20, 22, and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pisabarro et al. in view of Labarre et al and Hirano et al.

**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D. Kim whose telephone number is (571) 272-5266. The examiner can normally be reached on 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr Bragdon can be reached on (571) 272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander Kim  
May 2, 2007

A handwritten signature in black ink, appearing to read 'Richard Hutson', with a long horizontal line extending to the right.

RICHARD HUTSON, PH.D.  
PRIMARY EXAMINER